

**AMENDMENTS TO THE SPECIFICATION**

Please add the following section heading and paragraph on page 1, line 2 of the Specification (immediately following the Title of the Invention):

**CROSS REFERENCE TO RELATED APPLICATIONS**

This application claims the priority of Great Britain application 0405820.2, filed March 15, 2004, the disclosure of which is incorporated herein by reference in its entirety.

Please replace the last paragraph that begins on page 7 of the Specification with the following replacement paragraph:

With the various sensor systems and methods it is particularly useful, in embodiments, to employ a pump-probe approach. Thus in all the above aspects of the invention a system may be included for providing an optical pump pulse to excite the cavity followed by one or more interrogating pulses, optionally in a pattern, optionally at a different wavelength from the probe pulse (or pulses). These probe pulses can be used to interrogate a photochemical process on the evanescent wave interface, for example in conjunction with a functionalising material on the surface to enhance detection of a target substance, as described in more detail in the applicant's co-pending PCT application no. ~~XXX~~ PCT/GB2005/050034 entitled Functionalised Surface Sensing Apparatus And Methods, filed on ~~the same day as this application~~ March 15, 2005 (hereby incorporated in its entirety by reference). The timing of the probe pulse with respect to the pump may be adjusted by adjusting or selecting the longitudinal position of the taper optionally more than one taper may be employed to provide a plurality of different probe pulse timings for a common pump pulse. The skilled person will appreciate that the flexibility in the pump pulse or pulse sequence employed taken together with this flexibility in probe timing facilitates complex measurements and can potentially enhance target discrimination.

Please delete page 34, line 8 (that currently reads "Further aspects of the invention are defined in the following clauses:") through the last line of page 36 of the Specification.